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ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

Title of Invention	IN SITU THERMAL PROCESSING OF A HYDROCARBON CONTAINING FORMATION IN A REDUCING ENVIRONMENT						
Application Number: 09/841444 							
Confirmation Number: 4543							
First Named Applicant: Scott Wellington							
Attorney Docket Number: 5659-02300							
Art Unit: 3672							
Examiner: George A Suchfield							
Search string: (3165154 or							
US Patent Documents							
Note: Applicant is not required to submit a paper copy of cited US Patent Documents							
Init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
GS	1	3165154	1965-01-12	Santourian			
GS	2	4458757	1984-07-10	Bock et al			
Signature							
Examiner Name				Date			
George Suchfield				10/21/04			





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Search string: ( 4931171 or 4737267 or 4384948 or 3593790  
or 3497000 or 3244231 or 3223166 or  
3947656 ).pn.

### US Patent Documents

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Init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
69	1	4931171	1990-06-05	Piotter			
	2	4737267	1988-04-12	Pao et al.			
	3	4384948	1983-05-24	Barger			
	4	3593790	1971-07-20	Herce			
	5	3497000	1970-02-24	Hujak et al.			
	6	3244231	1966-04-05	Grekel et al.			
	7	3223166	1965-12-14	Hunt et al.			
69	8	3947656	1976-03-30	Lodi			

Signature

Examiner Name	Date
George Suchfield	10/21/04



Form PTO-1449 (modified)  
List of Patents and Publications  
For Applicant's Information  
Disclosure Statement

ATTY. DKT. NO. 5659-02300

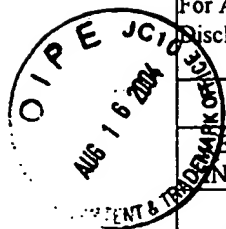
SERIAL NO. 09/841,444

APPLICANT: Wellington et al.

CONFIRMATION NO.: 4543

FILING DATE: April 24, 2001

GROUP: 3672



OTHER ART

EXAM. INITIALS	REF. DES.	OTHER ART (including Author, Title, Date, Pertinent Pages, etc.)
69	OA-01	U.S. Patent and Trademark Office, "Office Communication" for Application No. 09/841,431 mailed September 19, 2002 (17 pages).
	OA-02	U.S. Patent and Trademark Office, "Office Communication" for Application No. 09/841,308 mailed November 14, 2002 (19 pages).
	OA-03	U.S. Patent and Trademark Office, "Office Communication" for Application No. 09/841,446 mailed October 10, 2002 (20 pages).
	OA-04	U.S. Patent and Trademark Office, "Office Communication" for Application No. 09/841,446 mailed August 12, 2003 (16 pages).
	OA-05	U.S. Patent and Trademark Office, "Office Communication" for Application No. 09/841,439 mailed November 4, 2002 (13 pages).
	OA-06	U.S. Patent and Trademark Office, "Office Communication" for Application No. 09/841,061 mailed May 20, 2002 (15 pages).
	OA-07	U.S. Patent and Trademark Office, "Office Communication" for Application No. 09/841,061 mailed December 2, 2002 (16 pages).
	OA-08	U.S. Patent and Trademark Office, "Office Communication" for Application No. 09/841,061 mailed June 9, 2003 (13 pages).
	OA-09	U.S. Patent and Trademark Office, "Office Communication" for Application No. 09/841,061 mailed November 26, 2003 (7 pages).
	OA-10	U.S. Patent and Trademark Office, "Office Communication" for Application No. 09/841,128 mailed August 27, 2002 (23 pages).
	OA-11	U.S. Patent and Trademark Office, "Office Communication" for Application No. 09/841,128 mailed March 11, 2003 (23 pages).
	OA-12	U.S. Patent and Trademark Office, "Office Communication" for Application No. 09/841,128 mailed August 19, 2003 (20 pages).
	OA-13	U.S. Patent and Trademark Office, "Office Communication" for Application No. 09/841,493 mailed October 31, 2002 (13 pages).
	OA-14	U.S. Patent and Trademark Office, "Office Communication" for Application No. 09/841,302 mailed January 23, 2003 (19 pages).
	OA-15	U.S. Patent and Trademark Office, "Office Communication" for Application No. 09/841,302 mailed July 21, 2003 (20 pages).
	OA-16	U.S. Patent and Trademark Office, "Office Communication" for Application No. 09/841,302 mailed January 9, 2004 (4 pages).
	OA-17	U.S. Patent and Trademark Office, "Office Communication" for Application No. 09/841,440 mailed December 18, 2002 (19 pages).
69	OA-18	U.S. Patent and Trademark Office, "Office Communication" for Application No. 10/131,351 mailed July 19, 2004 (12 pages).

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George Suchfield

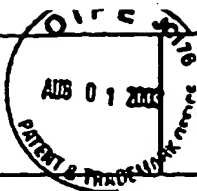
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Form PTQ-1449 (modified)  
List of Patents and Publications  
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ATTY. DKT. NO. 5659-02300

SERIAL NO. 09/841,444

APPLICANT: Wellington et al.

GROUP: 3672

FILING DATE: April 24, 2001

### U.S. PATENT DOCUMENTS

EXAM. INITIALS	REF. DES	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
GS	SS	2,857,002	10/21/1958	Pevere et al.			

### FOREIGN PATENT DOCUMENTS

EXAM. INITIALS	REF. DES.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES/NO
GS	T01	1836876	12/30/1994	SU			Y

### OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

GS	T02	Burnham, Alan, K. "Oil Shale Retorting Dependence of timing and composition on temperature and heating rate", January 27, 1995, (23 pages).					
	T03	Burnham et al. "A Possible Mechanism of Alkene/Alkane Production in Oil Shale Retorting, (7 pages).					
	T04	Campbell, et al., "Kinetics of oil generation from Colorado Oil Shale" IPC Business Press, Fuel, 1978, (3 pages).					
	T05	Cummins et al. "Thermal Degradation of Green River Kerogen at 150° to 350 °C", Report of Investigations 7620, U.S. Government Printing Office, 1972, (pages 1-15).					
	T06	Cook, et al. "The Composition of Green River Shale Oils", United Nations Symposium on the Development and Utilization of Oil Shale Resources, Tallinn, 1968, (pages 1-23).					
	T07	Hill et al., "The Characteristics of a Low Temperature in situ Shale Oil" American Institute of Mining, Metallurgical & Petroleum Engineers, 1967 (pages 75-90)..					
	T08	Dinneen, et al. "Developments in Technology for Green River Oil Shale" United Nations Symposium on the Development and Utilization of Oil Shale Resources, Tallinn, 1968, (pages 1-20).					
	T09	De Rouffignac, E. "In Situ Resistive Heating of Oil Shale for Oil Production-A Summary of the Swedish Data, (4 pages).					
	T10	Dougan, et al. "The Potential for in situ Retorting of Oil Shale in the Piceance Creek Basin of Northwestern Colorado", Quarterly of the Colorado School of Mines (pages 57-72).					
	T11	Hill et al. "Direct Production of Low Pour Point High Gravity Shale Oil" I&EC Product Research and Development, 1967, Volume 6, (pages 52-59).					
	T12	Yen et al., "Oil Shale" Developments In Petroleum Science, 5, Elsevier Scientific Publishing Co., 1976 (pages 187-198).					
	T13	SSAB report, "A Brief Description of the Ljungstrom Method for Shale Oil Production," 1950, (12 pages).					
	T14	Salomonsson G., SSAB report, "The Lungstrom In Situ-Method for Shale Oil Recovery, 1950 (28 pages)					
	T15	"Swedish shale oil-Production method in Sweden," Organisation for European Economic Cooperation, 1952, (70 pages).					
	T16	SSAB report, "Kvarn Torp" 1958, (36 pages).					
	T17	SSAB report, "Kvarn Torp" 1951 (35 pages).					
	T18	SSAB report, "Summary study of the shale oil works at Narkes Kvarntorp" (15 pages).					
GS	T19	Vogel et al. "An Analog Computer for Studying Heat Transfer during a Thermal Recovery Process," AIME Petroleum Transactions, 1955 (pages 205-212).					
	T20	"SKIFEROLJA GENOM UPPVARMNING AV SKIFTERBERGET," Pattn Department och Nander, 1941, (3 pages)					

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ATTY. DKT. NO. 5659-02300

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T21	"Aggregeringens olja (18-186) ransoneringen grunder", Av director E.E.Cederlund I Statens- livsmedelskommission (1 page).
T22	Ronnby, E. "KVARNTORP-Sveriges Största skifferoljeindustri," 1943, (9 pages)
GS T23	SAAB report, "The Swedish Shale Oil Industry," 1948 (8 pages).
T24	Gejrot et al., "The Shale Oil Industry in Sweden," Carlo Colombo Publishers-Rome, Proceedings of the Fourth World Petroleum Congress, 1955 (8 pages)
T25	Hedback, T. J., "The Swedish Shale as Raw Material for Production of Power, Oil and Gas," XIth Sectional Meeting World Power Conference, 1957 (9 pages)
T26	SAAB, "Santa Cruz, California, Field Test of the Lins Method for the Recovery of Oil from Sand", 1955 Vol. 1, (141 pages) English
T27	SAAB, "Santa Cruz, California, Field Test of the Lins Method for the Recovery of Oil from Sand-Figures", 1955 Vol. 2, (146 pages) English.
T28	"Santa Cruz, California, Field Test of the Lins Method for the Recovery of Oil from Sand-Memorandum re: tests", 1955 Vol. 3, (256 pages) English.
T29	Helander, R.E., "Santa Cruz, California, Field Test of Carbon Steel Burner Casings for the Lins Method of Oil Recovery", 1959 (38 pages) English.
T30	Helander et al., Santa Cruz, California, Field Test of Fluidized Bed Burners for the Lins Method of Oil Recovery" 1959, (86 pages) English.
T31	SSAB report, "Bradford Residual Oil, Athabasa Fl. McMurray" 1951, (207 pages), partial translation.
GS T32	"Lins Burner Test Results-English" 1959-1960
T33	SSAB "Annual Reports, SSAB Laboratory, Address Annually Issues Shale and Ash, Oil, Gas, Waste Water, Analytical", 1953-1954, (166 pages). Swedish
T34	SSAB report, "Financial Matter, Swedish taxes, etc.", 1960-1961 (37 pages). Swedish
T35	SSAB report, "Cost For Mining," 1959-1979 (13 pages). Swedish
T36	SSAB report, "Cost Comparison of Mining and Processing of Shale and Dolomite Using Various Production Alternatives", 1960, (64 pages). Swedish
T37	SSAB report, "Assessment of Future Mining Alternatives of Shale and Dolomite," 1962, (39 pages) Swedish
6 T38	SSAB report, "Kartong 2 Shale: Ljungstromsanlaggnngen" (104 pages) Swedish.
GS T39	SAAB, "Photos", (18 pages).
T40	SAAB report, "Swedish Geological Survey Report, Plan to Delineate Oil-shale Resource in Norrket Area (near Kvarntorp)," 1941 (13 pages). Swedish.
T41	SAAB report, "Recovery Efficiency," 1941, (61 pages). Swedish.
T42	SAAB report, "Geologic Work Conducted to Assess Possibility of Expanding Shale Mining Area in Kvarntorp; Drilling Results, Seismic Results," 1942 (79 pages). Swedish.
T43	SSAB report, "Ojemattigar vid Norrtorp," 1945 (141 pages).
T44	SSAB report, "Tidhopplingschema, Norrtorp II 20/3-17/8", 1945 (50 pages). Swedish.
T45	SSAB report, "Secondary Recovery after LINS," 1945 (78 pages)
T46	SSAB report, "Maps and Diagrams, Geology," 1947 (137 pages). Swedish.
T47	SSAB report, "Synthesprotokoll," 1943 (10 pages). Swedish.
T48	SSAB report, "Early Shale Retorting Trials" 1951-1952, (134 pages). Swedish.

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Section 609

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AUG 01 2003		APPLICANT: Wellington et al.	GROUP: 3672
		FILING DATE: April 24, 2001	
T49	SSAB report, "Analysis of Luleå Iron Ore and its Use as Liquid Fuel," Thesis by E. Pals, 1949 (83 pages). Swedish.		
T50	SSAB report, "Environmental Sulphur and Effect on Vegetation," 1951 (50 pages). Swedish.		
T51	SSAB report, "Tar Sands", Vol. 135-1953 (20 pages, pages 12-15 translated). Swedish.		
T52	SSAB report, "Assessment of Skaneateles Area (Southern Sweden) Shales as Fuel Source," 1954 (54 pages). Swedish.		
T53	SSAB report, "From as Ure Du Text Geology Reserves," 1960 (93 pages). Swedish.		
T54	SSAB report, "Kvarntorps Environmental Area Assessment," 1981 (50 pages). Swedish.		

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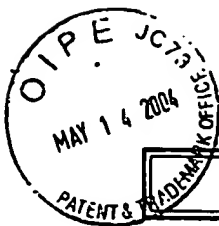


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<p><b>Certification:</b> This Information Disclosure Statement was submitted under the following conditions, which satisfies the requirement under 37 CFR 1.97(e). The filer certified:</p> <p>That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement.</p> <p><b>US Patent Documents</b></p> <p>Note: Applicant is not required to submit a paper copy of cited US Patent Documents</p> <table border="1"><thead><tr><th>init</th><th>Cite.No.</th><th>Patent No.</th><th>Date</th><th>Patentee</th><th>Kind</th><th>Class</th><th>Subclass</th></tr></thead><tbody><tr><td>69</td><td>1</td><td>3994340</td><td>1976-11-30</td><td>Anderson et al.</td><td></td><td></td><td></td></tr><tr><td></td><td>2</td><td>3994341</td><td>1976-11-30</td><td>Anderson et al.</td><td></td><td></td><td></td></tr><tr><td></td><td>3</td><td>4460044</td><td>1984-07-17</td><td>Porter</td><td></td><td></td><td></td></tr><tr><td></td><td>4</td><td>4696345</td><td>1987-09-29</td><td>Hsueh</td><td></td><td></td><td></td></tr><tr><td></td><td>5</td><td>2584605</td><td>1952-02-05</td><td>Merriam et al.</td><td></td><td></td><td></td></tr><tr><td>69</td><td>6</td><td>2969226</td><td>1961-01-24</td><td>Huntington</td><td></td><td></td><td></td></tr></tbody></table>		init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass	69	1	3994340	1976-11-30	Anderson et al.					2	3994341	1976-11-30	Anderson et al.					3	4460044	1984-07-17	Porter					4	4696345	1987-09-29	Hsueh					5	2584605	1952-02-05	Merriam et al.				69	6	2969226	1961-01-24	Huntington			
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69	7	3982591	1976-09-28	Hamrick et al.
69	8	3982592	1976-09-28	Hamrick et al.

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